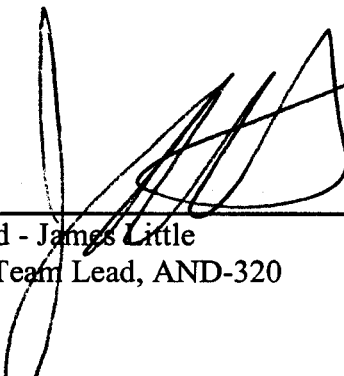




PROCESS IMPROVEMENT ACTION PLAN

AND-320 Voice Switching and Recording Product Team



Approved - James Little
Product Team Lead, AND-320



Date

AND-320 Process Improvement Action Plan

1. Purpose: This plan describes efforts to achieve ARA-identified FAA iCMM process improvement goals through FY05. ARA leadership has established the following goals for AND-320 acquisitions, Automated Flight Service Station – Voice Switch (AFSS-VS), and Digital Voice Recording –2 (DVR-2):

FY02: achieve FAA iCMM Capability Level 1 for the AFSS-VS and DRV-2 acquisitions in

- Project Management (Process Area 11)
- Risk Management (Process Area 13)
- Measurement and Analysis (Process Area 18)

FY03: achieve FAA iCMM Capability Level 2 for the AFSS-VS and DRV-2 acquisitions in

- Project Management (Process Area 11)
- Measurement and Analysis (Process Area 18)

And achieve FAA iCMM Capability Level 3 for all acquisitions, as part of AND-1 goal in

- Risk Management (Process Area 13)

FY04: achieve FAA iCMM Capability Level 1 for the AFSS-VS and DRV-2 acquisitions in

- Quality Assurance and Management (Process Area 15)
- Configuration Management (Process Area 16)

And achieve FAA iCMM Capability Level 3 for all acquisitions, as part of AND-1 goal in

- Project Management (Process Area 11)
- Measurement and Analysis (Process Area 18)

FY05: achieve FAA iCMM Capability Level 3 for all acquisitions, as part of AND-1 goal in

- Quality Assurance and Management (Process Area 15)
- Configuration Management (Process Area 16)

Acquisition Overview:

AUTOMATED FLIGHT SERVICE STATION VOICE SWITCH (AFSS VS)

The AFSS VS acquisition will replace a total of 65 voice switching systems at Automated Flight Service Stations (AFSS) throughout the NAS with a new integrated voice switch. This

acquisition also provided eight Small Tower Voice Switch systems for the non-automated Flight Service Stations (FSS) in the Alaskan region. All voice switching systems currently operational at Automated Flight Service Stations are of aging technology with limited supportability. Replacing the switches with modern equipment will significantly improve the operational and maintenance aspects of flight service operations.

DIGITAL VOICE RECORDER 2 (DVR-2)

This acquisition will provide modern commercial-off-the-shelf (COTS) voice recording equipment to support the requirements to provide legal recording capability for all voice communications involving air traffic control activities. The acquisition will involve a two-part procurement to modernize existing legal recording capability for low-to-mid-size terminal facilities, automated flight service stations, and flight service stations, as well as for Air Route Traffic Control Centers (ARTCC) and planned expanded Terminal Radar Approach Control (TRACON) facilities.

2. Acquisition Goals:

AFSS-VS

Acquire, deploy and implement AFSS-VS equipment to meet stated FAA requirements.

DRV-2

Replace legacy equipment with sustaining DRV-2 equipment in various FAA and DOD air traffic control facilities.

3. Process Area Objectives for FY02:

A. Project Management (PA11)

- Practices described in FAA iCMM version 2 are implemented as applicable to the AFSS-VS and DRV-2 acquisitions.
 - Product Team Lead determines applicability of each Base and Generic Practice (BP, GP) to AFSS-VS and DRV-2.
 - Document rationale for any Base Practice or Generic Practice determined by Product Team Lead to be not applicable.
- Develop Practices/Work Products Matrix for Project Management.
- Develop Capability Level 2 Generic Practices template.
- Assess AFSS-VS and DRV-2 team members' training and experience.
 - Determine if any members require additional training in project management skills.
 - Identify training sources and provide training as resources and acquisition requirements permit.
- Identify and document team members functioning as Project Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any improvement actions as needed.

B. Risk Management (PA13)

- Practices described in FAA iCMM version 2 are implemented as applicable to the AFSS-VS and DRV-2 acquisitions.
 - Product Team Lead determine applicability of each Base and Generic Practice (BP, GP) to AFSS-VS and DRV-2.
 - Document rationale for any Base Practice or Generic Practice determined by Product Team Lead to be not applicable.
- Develop Practices/Work Products Matrix for Risk Management.
- Develop Capability Level 2 Generic Practices template.
- Develop Risk Trend Analysis reporting
- Assess AFSS-VS and DRV-2 team members' training and experience.
 - Determine if any members require additional training in risk management skills.
 - Identify training sources and provide training as resources and acquisition requirements permit.
- Identify and document team members functioning as risk managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any improvement actions as needed.

C. Measurement and Analysis (PA 18)

- Practices described in FAA iCMM version 2 are implemented as applicable to the AFSS-VS and DRV-2 acquisitions.
 - Product Team Lead determine applicability of each Base and Generic Practice (BP, GP) to AFSS-VS and DRV-2.
 - Document rationale for any Base Practice or Generic Practice determined by Product Team Lead to be not applicable to a given acquisition.
- Determine appropriate measurements to be tracked and analyzed in each acquisition. Appropriate measurements are those that provide management with genuine insight into the progress of acquisition activities. Measurements should not be collected simply to "provide numbers".
- Develop a Practices/Work Products Matrix for Measurement and Analysis.
- Develop Capability Level 2 Generic Practices template.
- Assess AFSS-VS and DRV-2 team members' training and experience.
 - Determine if any members require additional training in Measurement and Analysis skills.
 - Identify training sources and provide training as resources and acquisition requirements permit.
- Identify and document team members functioning as Measurement and Analysis managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any improvement actions as needed.

4. Process Area Objectives for FY03:

A. Project Management (PA11)

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Project Management as needed.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Project Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement improvement actions as needed.

B. Risk Management (PA13)

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Risk Management needed.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Risk Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any improvement actions as needed.

C. Measurement and Analysis (PA 18)

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Measurement and Analysis needed.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Measurement and Analysis managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any improvement actions as needed.

5. Process Area Objectives for FY04:

A. Project Management (PA11)

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Project Management as needed.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Project Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.

- Participate in mock assessment.
- Participate in FAA iCMM assessment.
- Implement improvement actions as needed.

B. Risk Management (PA13)

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Risk Management needed.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Risk Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any improvement actions as needed.

C. Quality Assurance and Management (PA 15)

- Practices described in FAA iCMM version 2 are implemented as applicable to the AFSS-VS and DRV-2 acquisitions.
 - Product Team Lead/Deputy determine applicability of each Base and Generic Practice (BP, GP) to AFSS-VS and DRV-2.
 - Document rationale for any Base and Generic Practice determined by Product Team Lead to be not applicable to a given acquisition.
- Develop Practices/Work Products Matrix for Quality Assurance and Management (QA & M).
- Develop Capability Level 2 Generic Practices template.
- Assess AFSS-VS and DRV-2 team members' training and experience.
 - Determine if any team members require additional training in Quality Assurance and Management skills.
 - Identify training sources and provide training as resources and acquisition requirements permit.
- Identify and document team members functioning as Quality Assurance and Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate FAA iCMM assessment.
 - Implement any corrective actions required.

D. Configuration Management (PA 16)

- Practices described in FAA iCMM version 2 are implemented as applicable to the AFSS-VS and DRV-2 acquisitions.
 - Product Team Lead/Deputy determine applicability of each Base and Generic Practice (BP, GP) to AFSS-VS and DRV-2.
 - Document rationale for any BP or GP determined by Product Team Lead to be not applicable to a given acquisition.
- Develop Practices/Work Products Matrix for Configuration Management.
- Develop Capability Level 2 Generic Practices template.

- Assess AFSS-VS and DRV-2 team members' training and experience.
 - Determine if any team members require additional training in Configuration Management skills.
 - Identify training sources and provide training as resources and acquisition requirements permit.
- Identify and document team members functioning as Configuration Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any corrective actions required.

E. Measurement and Analysis (PA 18)

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Measurement and Analysis needed.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Measurement and Analysis managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any improvement actions as needed.

6. Process Area Objectives for FY05:

A. Project Management (PA11)

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Project Management as needed.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Project Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement improvement actions as needed.

B. Risk Management (PA13)

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Risk Management needed.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Risk Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.

- Implement any improvement actions as needed.

C. *Quality Assurance and Management (PA 15)*

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Quality Assurance and Management (QA & M).
- Update Capability Level 2 Generic Practices template.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Quality Assurance and Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate FAA iCMM assessment.
 - Implement any corrective actions required.

D. *Configuration Management (PA 16)*

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Configuration Management.
- Update Capability Level 2 Generic Practices template.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Configuration Management managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any corrective actions required.

E. *Measurement and Analysis (PA 18)*

- Practices described in FAA iCMM version 2 are sustained as applicable to the AFSS-VS and DRV-2 acquisitions.
- Update Practices/Work Products Matrix for Measurement and Analysis needed.
- Review AFSS-VS and DRV-2 team members' training and experience.
- Identify and document team members functioning as Measurement and Analysis managers, practitioners and stakeholders for purposes of FAA iCMM assessment participation.
 - Participate in mock assessment.
 - Participate in FAA iCMM assessment.
 - Implement any improvement actions as needed.

7. Process Improvement Approach:

The approach described in the Facilitated Discussion Appraisal Method (FDAM) of the *FAA-FAA iCMM Appraisal Method* (FAM) April 1999, section 3, will be used as a reference and tailored to provide a process improvement approach for the two AND-320 acquisitions.

The Facilitated Discussion Appraisal Method describes a process for self-appraisal of the current process and derivation of an improved process and implementation plan, after which the implementation action plan is carried out. Specifically:

Understand the current process: The current process that has been successfully used for many years will be understood

Derive the improved process: Using the generic process descriptions, the acquisition team members will migrate to the improved processes.

Implement the Process Improvement Action Plan: The approved multiyear Process Improvement Action Plan will be implemented.

8. Process Improvement Roles and Responsibilities

Role	Description	Responsible person(s) or group
AND Process Improvement Sponsor	Provides resources and demonstrates commitment	iPG Executive Member - Dan Salvano (AND-1) iPG Representative - Ken Kepchar (AND-230)
AND Process Improvement (PI) Lead	Leads the overall effort, provide materials and training, provide FAA iCMM and process improvement expertise	IEWG Member - Kris McKinzie (AND-230)

Role	Description	Responsible person(s) or group
<ul style="list-style-type: none"> Product Team Lead 	<ul style="list-style-type: none"> Leads AND-320 process improvement efforts 	<ul style="list-style-type: none"> Jim Little (AND-320)
<ul style="list-style-type: none"> Members 	Facilitate development of AND-320 process descriptions and plans; identify process training needs for AND-320 team members; develop and conduct AND-320 team training for AND-320 processes	<ul style="list-style-type: none"> Jenny Perez (AND-320) Clarissa Riffe (AND-320)
<ul style="list-style-type: none"> Review Team 	Validates the processes developed	Kris McKinzie Henry Gregory (PM) Ken Kepchar (RM) Keith Kratzert (M&A)

9. Process Improvement Risks and Mitigation Strategy:

The following risks are identified for the implementation of this Plan:

Risk Type	Mitigation	Risk Level
AND-320 approach to process improvement based on assumptions achieved through consensus with AND FAA iCMM review team. - Assumptions may not be shared by FAA Assessment Team.	Participate in mock assessments for each Process Area and achieve consensus on required corrective actions	Low
Resources required to implement this Process Improvement Action Plan conflict with resources needed for high priority acquisition activities	Obtain additional resources	Low
Training provided outside the AND-320 team may conflict with high priority acquisition activities	Obtain and distribute schedule for identified training; attempt to obtain training specifically for the AND-320 team	Low

10. Process Improvement Activities / Schedule / Milestones:

FY02		
Activity	Work product	Target Date
1. Develop Process Improvement Action Plan (PIAP)	Draft PIAP	July 2002
2. Assess training needs for acquisition team members	Training slots assigned	On going
3. Conduct Self-Appraisal	Out briefing at weekly staff meeting	Quarterly
4. Participate in mock assessments	Out briefing at weekly staff meeting	Quarterly
5. Implement process improvement actions	Improved processes	Aug 2002
6. Participate in AND Appraisal	Appraisal Results	Oct 2002

FY03		
Activity	Work product	Target Date
1. Approve Process Improvement Action Plan (PIAP)	Approved PIAP	April, 2003
2. Assess training needs for acquisition team members	Training slots assigned	On going
3. Conduct self-appraisal	List of deficient practices & corrective actions	May 2003
4. Participate in mock assessments	Out briefing at weekly staff meeting	Quarterly
5. Implement process improvement actions	Improved processes	Aug 2003
6. Participate in AND Appraisal	Appraisal Results	Oct 2003

FY04		
Activity	Work product	Target Date
1. Revise Process Improvement Action Plan (PIAP)	Updated approved PIAP	Dec, 2003
2. Assess training needs for acquisition team members	Training slots assigned	On going
3. Conduct self-appraisal	List of deficient practices & corrective actions	May 2004
4. Participate in mock assessments	Out briefing at weekly staff meeting	Quarterly
5. Implement process improvement actions	Improved processes	Aug 2004
6. Participate in AND Appraisal	Appraisal Results	Oct 2004

FY05		
Activity	Work product	Target Date
1. Revise Process Improvement Action Plan (PIAP)	Updated approved PIAP	Dec, 2004
2. Assess training needs for acquisition team members	Training slots assigned	On going
3. Conduct self-appraisal	List of deficient practices & corrective actions	May 2005
4. Participate in mock assessments	Out briefing at weekly staff meeting	Quarterly
5. Implement process improvement actions	Improved processes	Aug 2005
6. Participate in AND Appraisal	Appraisal Results	Oct 2005

11. Resource Requirements:

Following estimates are per fiscal year for FY02-FY04:

Role	Effort Estimates	Notes/Assumptions
FAA iCMM point of Contact	1040 hours	Includes reporting to higher management, coordinating activities/products and team resource management
Total	1040 hours/yr	Excludes institutionalization of improved process; part of overall process implementation

12. Point of Contact Measurements:

The Point of Contact will report to AND-1 Process Improvement Lead, and AND-300 Process Improvement Lead.

13. Process Improvement Action Plan (PIAP) Administration

A. The Process Improvement Action Plan will be reviewed annually at a minimum. The review will be conducted by Product Team members at the beginning of the fiscal year.

B. The record copy of the Process Improvement Action Plan will be maintained by the FAA iCMM Point of Contact.

Reference List:

FAA Integrated Capability Maturity Model (FAA-FAA iCMM), version 2.0, Sept 2001.

FAA Integrated Capability Maturity Model Appraisal Method (FAM), version 1.0, April 1999.